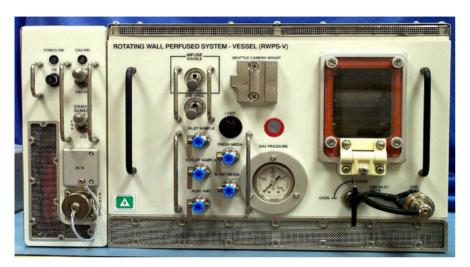


Rotating Wall Perfused System (RWPS)



Engineering Description

The RWPS is a bioreactor system used to grow three-dimensional tissue cultures in space or in simulated microgravity on earth. The RWPS houses a rotating wall perfused vessel that is maintained at 36 degrees C and supports long-term cell growth up to 120 days. During this term, the system maintains temperature, circulates and oxygenates media, and facilitates removal of media samples, cell samples, and expended products. This unit provides controls for temperature and reactor vessel motion and monitoring for media gassification and pressure.